Application No.: 09/722,270 Docket No.: R2184.0089/P089

AMENDMENTS TO CLAIMS

1. (currently amended) An image forming method, comprising the steps of:

a) multi-level quantizing a multi-tone image by an error diffusion method; and

b) representing each pixel of the thus-quantized image having a quantized level higher than 0 using a dot which is larger as the quantized level thereof is higher,

wherein occurrence of dots having a specific size is repressed in a specific shade region relating to the dots; and

wherein re-quantization is performed, after the multi-level quantization is performed, in which, for a pixel having a specific quantization level, image data having an error added thereto according to the error diffusion method is compared with a threshold, and a final output value is determined.

2. (original) The method as claimed in claim 1, wherein occurrence of the smallest dots is repressed.

3. (original) The method as claimed in claim 1, wherein occurrence of the dots other than the largest dots is repressed.

4. (original) The method as claimed in claim 1, wherein an occurrence rate of the dots having the specific size is controlled based on the number of dots in a specific region in the periphery of a target pixel.

5. (original) The method as claimed in claim 1, wherein an occurrence rate of the dots having the specific size is controlled based on the number of dots in a specific region in the periphery of a target pixel and a shade level of the target pixel.

6. (original) The method as claimed in claim 1, wherein an occurrence rate of the dots having the specific size is controlled based on the number of dots having a specific size in a specific region in the periphery of a target pixel.

7. (original) The method as claimed in claim 1, wherein an occurrence rate of the dots having the specific size is controlled based on the number of dots having a specific size in a specific region in the periphery of a target pixel and a shade level of the target pixel.

8. (original) The method as claimed in claim 1, wherein a degree of repressing occurrence of the dots having the specific size is changed according to a feature of the image.

9. (currently amended) An image forming method, comprising the steps of:

a) multi-level quantizing a multi-tone image by an error diffusion method; and

b) representing each pixel of the thus-quantized image having a quantized level higher than 0 using a dot which is larger as the quantized level thereof is higher,

wherein occurrence of dots having a specific size is repressed in a specific shade region relating to the dots,

wherein a degree of repressing occurrence of the dots having the specific size is changed according to a feature of the image; and

~~The method as claimed in claim 8,~~ wherein occurrence of the dots having the specific size is repressed only for a picture region of the image.

10. (currently amended) An image forming method, comprising the steps of:

a) multi-level quantizing a multi-tone image by an error diffusion method; and

b) representing each pixel of the thus-quantized image having a quantized level higher than 0 using a dot which is larger as the quantized level thereof is higher,

wherein occurrence of dots having a specific size is repressed in a specific shade region relating to the dots,

wherein a degree of repressing occurrence of the dots having the specific size is changed according to a feature of the image; and

~~The method as claimed in claim 8,~~ wherein the degree of repressing occurrence of the dots having the specific size is made weaker for a character region of the image than for a picture region of the image.

11. (currently amended) An image forming method, comprising the steps of:

a) multi-level quantizing a multi-tone image by an error diffusion method; and

b) representing each pixel of the thus-quantized image having a quantized level higher than 0 using a dot which is larger as the quantized level thereof is higher,

wherein occurrence of dots having a specific size is repressed in a specific shade region relating to the dots,

wherein a degree of repressing occurrence of the dots having the specific size is changed according to a feature of the image; and

~~The method as claimed in claim 8,~~ wherein occurrence of the dots having the specific size is repressed only for a non-edge region of the image.

12. (original) The method as claimed in claim 1, wherein repressing of occurrence of the dots having the specific size is performed for a medium shade region of the image.

13. (original) The method as claimed in claim 1, wherein repressing of occurrence of the dots having the specific size is performed for a dark shade region of the image.

14. (original) The method as claimed in claim 1, wherein repressing of occurrence of the dots having the specific size is performed for medium and dark shade regions of the image.

15. (currently amended) An image processing method, comprising the steps of:

a) multi-level quantizing multi-tone image data; and

b) repressing occurrence of one or more specific quantized levels for a specific level region of the image data relating to the one or more specific quantized levels; and

wherein re-quantization is performed, after the multi-level quantization is performed, in which, for a pixel having a specific quantization level, image data having an error added thereto according to the error diffusion method is compared with a threshold, and a final output value is determined.

16. (original) The method as claimed in claim 15, wherein re-quantization is performed for the one or more specific quantized levels, occurrence of which is to be repressed.

17. (original) The method as claimed in claim 15, wherein occurrence of the one or more specific quantized levels is repressed for a medium level region of the image data.

18. (original) The method as claimed in claim 15, wherein occurrence of the one or more specific quantized levels is repressed for a high level region of the image data.

19. (original) The method as claimed in claim 15, wherein occurrence of the one or more specific quantized levels is repressed for medium and high level regions of the image data.

20. (original) The method as claimed in claim 15, wherein an occurrence rate of the one or more specific quantized levels, occurrence of which is to be repressed, is controlled based on the number of pixels quantized to quantized levels higher than 0 in a specific region in the periphery of a target pixel.

21. (original) The method as claimed in claim 15, wherein an occurrence rate of the one or more specific quantized levels, occurrence of which is to be repressed, is controlled based on the number of pixels quantized to quantized levels higher than 0 in a specific region in the periphery of a target pixel and the level of the image data of the target pixel.

22. (original) The method as claimed in claim 15, wherein an occurrence rate of the one or more specific quantized levels, occurrence of which is to be repressed, is controlled based on the number of pixels quantized to a specific quantized level in a specific region in the periphery of a target pixel.

23. (original) The method as claimed in claim 15, wherein an occurrence rate of the one or more specific quantized levels, occurrence of which is to be repressed, is controlled based on the number of pixels quantized to a specific quantized level in a specific region in the periphery of a target pixel and the level of the image data of the target pixel.

24. (original) The method as claimed in claim 15, wherein a degree of repressing occurrence of the one or more specific quantized levels is changed according to a feature of the image.

25. (currently amended) An image processing method, comprising the steps of:

a) multi-level quantizing multi-tone image data; and

b) repressing occurrence of one or more specific quantized levels for a specific level region of the image data relating to the one or more specific quantized levels,

wherein a degree of repressing occurrence of the one or more specific quantized levels is changed according to a feature of the image; and

~~The method as claimed in claim 24,~~ wherein occurrence of the one or more specific quantized levels is repressed only for a picture region of the image.

26. (currently amended) An image processing method, comprising the steps of:

a) multi-level quantizing multi-tone image data; and

b) repressing occurrence of one or more specific quantized levels for a specific level region of the image data relating to the one or more specific quantized levels,